

ABSTRACT OF THE DISCLOSURE *to the patent application*
No. 10/826001

Notice: Initial Abstract is canceled.

Please provide currently amended Abstract of the Disclosure:

ABSTRACT

A sintered three-dimensional (3D) high temperature superconducting (HTS) macro-ceramic solid product with honeycomb-like superconductive nano-architecture, comprising a sintered structure containing uniformly aligned YBCO ceramic crystal grains with a length of 10 – 25nm and silicate glass or inorganic nano-thick films or nano-size dots that locate in nano-thick boundary areas of said superconductor ceramic crystal grains, and said nano-size films or dots provide honeycomb-like 3D nano-size network within said sintered 3D HTS solid product or HTS ceramic lead, and said electric lead is superconducting at least at liquid nitrogen temperature. The superconductive nano-architecture of the sintered YBCO ceramic material facilitates advanced electro-magnetic and mechanical properties, reliability and durability of the HTS ceramic lead or electric wire.